

Accessory Publication

Table A1. Grain yield (t/ha) of 25 bread wheat genotypes (1-25) evaluated in 4 locations in India, S1: Hisar, S2: Karnal, S3: Ludhiana, and S4: Varanasi, and in 4 sowing times (T1, T2, T3, T4)

Genotype	T1				T2			
	S1	S2	S3	S4	S1	S2	S3	S4
1	478	662	660	339	374	422	360	404
2	602	596	280	447	470	448	265	441
3	515	624	550	360	451	332	270	338
4	474	502	435	495	469	287	370	314
5	589	560	600	440	448	395	335	404
6	435	567	435	434	384	429	325	338
7	544	575	460	441	414	457	310	459
8	530	516	435	446	436	382	345	320
9	618	526	410	438	442	349	260	362
10	549	564	535	398	412	371	330	416
11	521	515	420	428	452	280	275	333
12	648	463	335	462	452	376	330	308
13	443	545	470	396	357	393	320	398
14	449	204	390	423	417	330	325	326
15	561	518	505	407	395	347	340	392
16	506	585	320	368	452	499	200	410
17	521	600	505	372	404	460	340	410
18	521	643	545	376	404	382	370	392
19	653	579	665	226	489	367	290	430
20	561	307	160	315	395	300	150	253
21	398	426	295	428	330	373	225	260
22	529	591	560	434	496	558	310	416
23	631	536	520	398	564	351	305	404
24	605	544	330	377	371	352	230	362
25	504	507	505	326	478	358	325	416

Table A1 contd.

Genotype	T3				T4			
	S1	S2	S3	S4	S1	S2	S3	S4
1	574	624	518	495	346	368	338	450
2	560	602	475	479	414	572	378	367
3	561	514	448	438	420	503	343	404
4	499	485	513	446	315	425	300	369
5	505	613	455	477	326	545	353	431
6	557	641	427	434	384	535	369	381
7	524	631	415	479	410	591	378	400
8	567	479	438	474	369	416	340	365
9	544	539	426	430	425	220	313	415
10	507	549	439	503	459	410	378	413
11	527	523	475	491	345	423	328	378
12	474	413	508	363	377	421	328	306
13	452	599	467	456	408	477	330	382
14	362	390	388	313	345	396	261	318
15	614	513	418	377	461	501	293	376
16	593	586	499	503	494	523	300	434
17	500	523	433	558	373	479	336	367
18	625	576	523	473	433	515	313	413
19	639	619	400	458	450	594	363	435
20	517	493	363	321	496	409	298	282
21	484	474	403	301	364	431	328	309
22	476	424	400	393	374	409	329	342
23	577	641	490	504	410	567	375	413
24	564	507	483	444	446	437	372	408
25	662	484	476	366	482	526	356	313

Table A2. Values of the 3-way interaction of the 3-mode AMMI of genotype (1–25) × location (S1, S2, S3, S4) × sowing time (T1, T2, T3, T4) for grain yield (t/ha) of data set 1

Genotype	T1				T2			
	S1	S2	S3	S4	S1	S2	S3	S4
1	-50.03	65.58	96.15	-111.69	<u>-12.06</u>	9.17	-14.09	16.98
2	57.87	16.73	-111.81	37.21	-1.15	-17.66	-6.56	25.38
3	-55.44	54.29	53.49	-52.35	42.03	-34.10	-16.75	8.82
4	-36.56	13.42	-50.75	73.89	72.15	-46.23	45.74	-71.67
5	28.59	-54.29	60.90	-35.19	36.56	-28.70	-7.34	-0.52
6	-44.31	-7.20	-2.88	54.39	1.28	-8.48	30.99	-23.80
7	20.27	-30.98	8.83	1.86	-17.37	-15.51	-1.03	33.91
8	-12.41	8.70	-30.97	34.68	2.31	24.55	35.03	-61.89
9	18.87	33.48	-43.94	-8.41	-14.65	39.58	-4.18	-20.73
10	-6.09	25.39	31.71	-51.00	-16.12	-0.01	0.96	15.16
11	-5.22	22.64	-29.41	11.99	59.25	-38.26	6.84	-27.83
12	79.93	-27.95	-130.38	78.39	-8.09	34.14	20.37	-46.42
13	-18.09	3.26	16.58	-1.75	-10.49	-14.01	8.46	16.04
14	27.90	-145.85	11.58	106.36	10.62	35.48	<u>8.59</u>	-54.70
15	-19.62	-16.63	33.68	2.58	-58.90	-19.79	42.68	36.01
16	-8.81	40.67	<u>-23.63</u>	-8.22	-11.34	47.76	-43.87	7.44
17	7.43	27.92	27.49	-62.85	-16.34	22.26	3.49	-9.42
18	-40.59	55.89	31.58	-46.88	-25.99	-32.38	35.96	22.41
19	29.87	-19.01	159.93	-170.78	-0.65	-55.41	-33.31	89.38
20	70.43	-60.57	-90.50	80.64	-36.71	32.39	5.62	-1.30
21	-32.22	-28.23	-63.53	123.99	-12.62	46.98	1.34	-35.70
22	-41.97	1.26	48.46	-7.75	6.25	90.11	-73.03	-23.33
23	31.18	-34.45	33.11	-29.85	76.65	-65.35	-21.62	10.32
24	57.96	41.33	-83.97	-15.32	-43.56	22.92	-3.72	24.35
25	-58.91	14.58	48.27	<u>-3.94</u>	-21.06	-29.45	-20.59	71.10
Genotype	T3				T4			
	S1	S2	S3	S4	S1	S2	S3	S4
1	37.22	14.28	-50.09	-1.41	<u>24.87</u>	-89.03	-31.96	96.13
2	-22.86	-20.06	49.44	-6.50	-33.84	20.99	68.94	-56.08
3	21.56	-28.75	-12.49	19.67	-8.16	8.55	-24.24	23.84
4	-11.93	-8.00	31.87	-11.94	-23.66	40.80	-26.87	9.72
5	-11.65	38.40	-35.34	8.58	-53.50	44.59	-18.21	27.13
6	40.06	24.12	-43.99	-20.19	2.96	-8.44	15.87	-10.4

7	2.16	21.84	-29.27	5.27	-5.06	<u>24.65</u>	21.47	-41.05
8	26.10	-31.34	-21.96	27.21	-16.00	-1.91	17.91	0.00
9	-32.61	64.43	-0.43	-31.38	28.40	-137.50	48.56	60.53
10	-26.71	27.21	-38.40	37.89	48.93	-52.59	5.72	-2.05
11	-22.96	2.34	6.84	13.77	-31.06	13.27	15.72	2.06
12	-47.68	-35.12	94.00	-11.19	-24.16	28.93	16.00	-20.77
13	-30.58	31.71	-0.90	-0.22	59.18	-20.97	-24.15	-14.05
14	-46.71	47.96	26.47	-27.72	8.18	62.40	-46.65	-23.93
15	59.88	0.31	-22.30	-37.88	18.65	36.12	-54.05	-0.71
16	-13.55	-54.12	69.12	-1.44	33.71	-34.31	-1.62	2.22
17	-8.93	-48.00	-34.87	91.80	17.83	-2.19	3.87	-19.52
18	44.41	-34.15	-4.40	-5.85	22.18	10.65	-63.15	30.31
19	26.25	27.81	-89.18	35.11	-55.47	46.62	-37.43	46.28
20	-51.93	42.49	38.62	-29.19	<u>18.21</u>	-14.31	46.25	-50.15
21	34.28	-4.28	29.47	-59.47	10.55	-14.47	32.72	-28.8
22	19.53	-55.78	7.97	28.27	16.18	-35.59	16.59	2.81
23	-45.8	43.49	-14.37	16.67	-62.03	56.30	2.87	2.84
24	-9.40	-26.59	47.16	-11.16	-5.00	-37.66	40.53	2.13
25	71.85	-40.22	-2.96	-28.66	8.12	55.09	-24.71	-38.49

Table A3. Values of the two-way interaction of the two-mode AMMI of genotype (1-25) × environments [combination of location (S1, S2, S3, S4) and sowing time (T1, T2, T3, T4)] of grain yield (t/ha) for data set 1

Genotype	S1T1	S2T1	S3T1	S4T1	S1T2	S2T2	S3T2	S4T2
1	-85.50	103.26	178.64	-88.16	-84.48	9.90	31.44	3.56
2	39.09	38.35	-200.26	20.43	12.61	36.49	-62.46	41.15
3	-27.09	86.66	90.04	-45.75	13.42	-58.69	-37.15	-41.53
4	-44.84	-12.08	-1.70	111.99	55.17	-80.44	86.09	-42.28
5	21.37	-2.86	114.51	8.71	-14.60	-21.22	2.31	-0.56
6	-107.96	29.79	-25.32	27.87	-53.44	37.43	17.47	-41.40
7	-24.68	12.07	-26.04	8.65	-49.66	40.21	-23.24	53.37
8	0.62	-8.11	-11.73	53.46	12.14	4.52	51.06	-46.31
9	97.46	10.72	-27.89	54.30	26.98	-20.13	-25.09	5.02
10	-3.81	16.94	64.82	-17.97	-35.29	-29.91	12.62	26.74
11	1.06	0.32	-17.79	44.40	37.08	-89.03	-9.99	-23.87
12	137.53	-42.70	-93.32	87.87	46.55	16.43	54.47	-39.9
13	-88.18	19.07	20.95	1.15	-69.66	12.71	23.75	29.87
14	-4.06	-243.3	19.57	106.27	69.45	28.83	107.37	35.99

15	21.71	-16.02	48.35	4.05	-38.76	-40.38	36.15	16.27
16	-48.71	35.04	-152.57	-50.37	1.80	95.18	-119.77	18.34
17	-28.09	55.66	38.04	-41.25	-40.07	61.80	25.84	23.96
18	-48.31	78.94	57.82	-56.97	-60.29	-35.91	35.62	-14.25
19	74.21	4.97	168.35	-216.94	14.73	-60.38	-53.84	14.27
20	109.03	-139.7	-209.32	-0.12	48.55	-0.06	-66.52	-35.4
21	-67.06	-33.30	-87.42	99.77	-29.54	59.83	-4.62	-42.00
22	-11.81	55.44	101.82	30.02	60.70	168.58	4.62	38.74
23	50.28	-39.95	21.42	-46.37	88.30	-78.31	-40.77	-13.65
24	77.25	22.01	-115.11	-14.41	-51.73	-23.85	-62.31	-2.19
25	-39.50	-31.24	44.14	-80.66	40.02	-33.6	16.94	36.06

	S1T3	S2T3	S3T3	S4T3	S1T4	S2T4	S3T4	S4T4
1	7.52	57.72	38.16	27.88	-87.64	-128.4	-26.52	42.62
2	-5.88	37.31	-3.24	12.47	-18.54	76.69	14.57	-38.78
3	15.42	-30.87	-10.43	-8.21	7.76	28.50	-0.11	18.02
4	-23.32	-36.62	77.81	23.03	-73.48	-26.24	-19.36	6.27
5	-65.60	43.09	-28.46	5.75	-111.76	44.97	-15.64	19.99
6	11.05	95.75	-31.8	-12.08	-28.6	60.63	25.51	-4.84
7	-47.66	60.03	-69.02	7.19	-27.82	89.91	8.79	-12.06
8	34.64	-52.65	-7.21	41.50	-29.51	-45.27	10.60	-7.75
9	20.48	16.18	-9.87	5.84	34.82	-232.43	-7.55	51.08
10	-48.79	-5.59	-29.65	46.56	37.04	-75.21	24.66	16.80
11	4.08	0.78	39.22	66.94	-45.07	-29.33	7.04	14.18
12	-39.94	-99.74	81.19	-51.58	-3.10	-22.36	16.51	-47.84
13	-82.66	65.53	21.47	20.69	7.17	12.91	-1.70	6.93
14	-94.04	-64.84	19.09	-43.18	22.29	11.03	7.41	22.05
15	71.73	-28.56	-37.12	-65.9	52.57	29.31	-46.80	-6.66
16	34.80	28.50	28.44	44.66	69.14	35.38	-55.23	35.40
17	-52.57	-28.37	-32.43	105.28	-45.73	-2.49	-13.61	-25.97
18	52.20	4.40	37.34	-0.43	-5.95	13.28	-57.33	-0.19
19	56.73	37.93	-94.62	-24.90	1.07	82.81	-16.80	12.33
20	62.05	38.75	-4.80	-34.58	174.89	24.63	45.51	-12.84
21	15.95	7.15	22.09	-67.18	29.29	34.03	62.41	0.55
22	-67.79	-119.09	-56.15	-51.43	-35.95	-63.71	-12.33	-41.69
23	-7.19	57.50	-6.55	19.66	-40.35	53.38	-6.23	-11.09
24	33.27	-22.53	39.41	13.13	48.61	-22.65	43.73	37.37
25	115.52	-61.78	17.16	-81.12	68.86	50.60	12.48	-73.88